TOCRIS a bio-techne brand

Print Date: Sep 16th 2020

Certificate of Analysis

www.tocris.com

Product Name: SBP1 **Catalog No.: 7233** **Batch No.: 2**

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{127}H_{185}N_{31}O_{41}$

Batch Molecular Weight: 2802.05

Physical Appearance: White lyophilised solid

Net Peptide Content: 85%

Counter Ion: TFA

Solubility: Soluble to 1 mg/ml in PBS

Storage: Store at -20°C

Peptide Sequence: Ile-Glu-Glu-Gln-Ala-Lys-Thr-Phe-Leu-Asp-Lys-Phe-Asn-His-Glu-Ala-Glu-Asp-Leu-Phe-Tyr-Gln-Ser-NH_2

2. ANALYTICAL DATA

HPLC: Shows 99% purity

Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid	Theoretical	Actual	Amino Acid	Theoretical	Actual
Ala	2.00	1.95	Lys	2.00	2.02
Arg			Met		
Asx	3.00	3.02	Phe	3.00	2.96
Cys			Pro		
Glx	6.00	5.95	Ser	1.00	1.00
Gly			Thr	1.00	0.88
His	1.00	1.06	Trp		
Ile	1.00	1.03	Tyr	1.00	1.04
Leu	2.00	1.95	Val		

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956

Product Name: SBP1 **Catalog No.: 7233** **Batch No.: 2**

Description:

Human ACE2 receptor-derived 23-amino acid peptide. Binds receptor binding domain (RBD) of insect-derived SARS-CoV-2 spike protein (K_D = 1.3 µM for N-terminal biotinylated, insect-derived spike protein RBD; see Zhang et al preprint publication). Please note - unpublished, in-house data suggests approximately 75-fold lower affinity for insect-derived SARS-CoV-2 RBD than reported by Zhang et al.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{127}H_{185}N_{31}O_{41}$

Batch Molecular Weight: 2802.05

Physical Appearance: White lyophilised solid

Peptide Sequence:

Ile-Glu-Glu-Gln-Ala-Lys-Thr-Phe-Leu-Asp-Lys-Phe-Asn-His-Glu-Ala-Glu-Asp-Leu-Phe-Tyr-Gln-Ser-NH_2

Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 1 mg/ml in PBS

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Net Peptide Content: 85% (Remaining weight made up of counterions and residual water).

Counter Ion: TFA

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Peptides in solution are much less stable than in lyophilized form. This is especially true for peptides whose sequences contain amino acids such Cys, Met,Trp, Asn, Gln, and N-terminal Glu.

Therefore we recommend storing peptides in solution for as short a time as possible. Avoid repeated freeze thaw cycles by dividing the peptide solution into aliquots and storing the aliquots at -20°C. Any portion of an aliquot unused after thawing should be discarded.

Peptides stored in solution can occasionally be susceptible to bacterial degradation. We recommend using sterile solutions or passing the peptide solution through a 0.2 µm filter to remove potential bacterial contamination whenever possible.

References:

Zhang *et al* (2020) Investigation of ACE2 N-terminal fragments binding to SARS-CoV-2 Spike RBD . BioRxiv - Paper not yet peer reviewed.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use